Appl. No. Unassigned; Docket No. DE020252US Amdt. dated March 30, 2005 Preliminary Amendment

Amendments to the Specification

An integrated circuit having

a system base chip (1) that has basic functions for a transmitting and/or receiving system for a vehicle data bus, namely at least a system voltage supply (3), a system reset (3) and a monitoring function (2),

an interface circuit (4, 5) that, in a self-contained fashion, runs at least parts of a data bus protocol, and in particular the LIN (Local Interconnect Network) protocol, that performs detection of the bit-rate of received data, and that is capable of passing on at least one received or transmitted byte.

a serial/parallel converter (5) that makes use in its conversion of the bit-rate detected by the interface circuit (4, 5).

Fig. 1

The invention relates to an integrated circuit having a system base chip of the kind usually provided for performing transmitting and/or receiving functions at a node that is coupled to a vehicle data bus. In an example embodiment, there is an integrated circuit having a system base chip that has basic functions for a transmitting and/or receiving system for a vehicle data bus, namely at least a system voltage supply, a system reset and a monitoring function. An interface circuit that, in a self-contained fashion, runs at least parts of a data bus protocol, and in particular, the LIN (Local Interconnect Network) protocol, that performs detection of the bit-rate of received data, and that is capable of passing on at least one received or transmitted byte. A serial/parallel converter makes use in its conversion of the bit-rate detected by the interface circuit.